

Mecklenburg County Environmental Health

## VGB Approved Covers

Main Drain Covers and Equalizer Line Covers

<sup>\*\*</sup> This is not a substitution for listed manufacturer specifications and is subject to change. \*\*

## **Drain Cover Life**

Afras – 6 years

Aquastar – 5 year

Bee Safe - 7 years

Color Match – 5 years

Custom Molded – 7 years

*DrainSafe* – 5 years

Hayward – 7 years

Lawson – 10 years

*Neptune Benson* – 15 years

Paddock Stainless Steel - Lifetime -

Inspect annually at 10 years and every year thereafter for damage. Change screws every 7 years. Replace/repair as needed.

Paramount – 5 years

*Pentair* – 7 years

Waterway – 7 years

VGB Approved Drain Cover	Manufacturer/Description	Model #	Max Flow in GPM	Sump Info
	AFRAS 7 3/4" Anti-Vortex <i>Ring</i> and <i>Cover</i> – ABF64	10064xxxx	Floor: 86 Wall: 68	Distance from Pipe to Cover At least 1.5x pipe diameter
A STATE OF THE PARTY OF THE PAR	AFRAS 7 3/4" Anti-Vortex <i>Cover Only</i> — ABF64	11064xxxx	Floor: 86 Wall: 68	Distance from Pipe to Cover At least 1.5x pipe diameter
THE REAL PROPERTY OF THE PARTY	AFRAS  High Capacity Cover –  Cover Only  Retrofit for most AFRAS  covers – ABF64A  11.125" in diameter	10064Axxx	Floor: 188 Wall: 160	Distance from Pipe to Cover At least 1.5x pipe diameter
	AFRAS  High Capacity Cover with Ring- Retrofit for 10064Axxx  11.125" in diameter	10064ARxxx	Floor: 188 Wall: 160	Distance from Pipe to Cover At least 1.5x pipe diameter

VGB Approved Drain Cover	Manufacturer/Description	Model #	Max Flow in GPM	Sump Info
	AFRAS  High Capacity Cover with Plate  11.125" in diameter	10064ADxxx	Floor: 188 Wall: 160	Sumpless
	AFRAS  12"x12" Ring Plate <i>only</i>	10064ACxxx	Floor: 188 Wall: 160	Distance from Pipe to Cover At least 1.5x pipe diameter
	AFRAS  12"x12" Ring Plate with additional Plate	10064ACF	Floor: 188 Wall: 160	Distance from Pipe to Cover At least 1.5x pipe diameter

VGB Approved Drain Cover	Manufacturer/Description	Model #	Max Flow in GPM	Sump Info
	9" Square MoFlow Suction Outlet Cover and Mud Frame and/or bushing	9MFxxx	Floor: 258 Wall: 274	Sump Depth 3" minimum to pipe
	AquaStar  9" Square MoFlow Suction Outlet Cover with Bushing Kit	R9MFxxx	Floor: 258 Wall: 274	Sump Depth 3" minimum to pipe
	AquaStar  9" Square Wave Anti- Entrapment Suction Outlet Cover, Vented Riser Ring and Mud Frame	WAV9WRxxx	Floor: 224 Wall: 224	Sump Depth 3" minimum to pipe

VGB Approved Drain Cover	Manufacturer/Description	Model #	Max Flow in GPM	Sump Info
	Aquastar  9" Square Star Anti- Entrapment Suction Outlet Cover, Vented Riser Ring and Mud Frame	P9xxx	Floor: 270 Wall: 270	Sump Depth 3" minimum to pipe
	AquaStar  12" Square MoFlow Suction Outlet Cover and Mud Frame and/or bushing	12MFxxx	Floor: 274 Wall: 278	Sump Depth 3" minimum to pipe
	AquaStar  12" Square MoFlow Suction Outlet Cover and Mud Frame and/or bushing	R12MFxxx	Floor: 274 Wall: 278	Sump Depth 3" minimum to pipe

VGB Approved Drain Cover	Manufacturer/Description	Model #	Max Flow in GPM	Sump Info
	AquaStar  12" Square Wave Anti- Entrapment Suction Outlet Cover, Vented Riser Ring and Mud Frame	Wav12WRxxx	Floor: 361 Wall: 361	Sump Depth 3" minimum to pipe
	AquaStar  12" Square Star Anti- Entrapment Suction Outlet Cover, Vented Riser Ring and Mud Frame	P12xxx	Floor: 360 Wall: 360	Sump Depth 3" minimum to pipe
	AquaStar  14" Square Anti- Entrapment Suction Outlet Cover for 9" Square Retrofits or New Construction	914xxx	Floor: 560 Wall: 300	Sump Depth 3" minimum to pipe
	AquaStar  16" Square Anti- Entrapment Suction Outlet Cover for 12" Square Retrofits or New Construction	1216xxx	Floor: 460 Wall: 445	Sump Depth 3" minimum to pipe

VGB Approved Drain Cover	Manufacturer/Description	Model #	Max Flow in GPM	Sump Info
WHITE AND ADDRESS OF THE PARTY	AquaStar  18" Square Frame with Four 9" Square Wave Anti- Entrapment Suction Outlet Covers and Vented Riser Rings	WAV18WRxxx	Floor/Wall: 628	Sump Depth 6" minimum to pipe
	AquaStar  18" Square Mud Frame with Four 9" Square MoFlow Suction Outlet Covers	18MFxxx	Floor: 293 (only)	Sump Depth 6" minimum to pipe
	AquaStar  18" Square Mud Frame with Four 9" Square MoFlow Suction Outlet Covers	P18xxx	Floor: 740 Wall: 740	Sump Depth 6" minimum to pipe
	AquaStar  18" Square Mud Frame with Four 9" Square SUN/8HPH Suction Outlet Covers	SUN18HPHxxx	Floor: 1000 Wall: 644	Sump Depth 6" minimum to pipe

VGB Approved Drain Cover	Manufacturer/Description	Model #	Max Flow in GPM	Sump Info
	AquaStar  24" Square Frame with Four 12" Square Wave Anti-Entrapment Suction Outlet Covers	WAV24xxx	Floor/Wall: 1444	Sump Depth 12" minimum to pipe
	AquaStar  24" Square Frame with Four 12" Square Flat Grate Anti-Entrapment Suction Outlet Covers	24xxx	Floor: 1531 Wall: 1531	Sump Depth 12" minimum to pipe
The state of the s	AquaStar  10" Round Anti- Entrapment Suction Outlet Cover, Solid Riser Ring and Mud Frame	10AVRxxx	Floor: 166 Wall: 96	Sump Depth 3" minimum to pipe
	AquaStar  8" Round MoFlow Suction Outlet Cover and Mud Frame	8MFxxx	Floor: 166 Wall: 113	Sump Depth 3" minimum to pipe

VGB Approved Drain Cover	Manufacturer/Description	Model #	Max Flow in GPM	Sump Info
	AquaStar  8" Round Retrofit MoFlow Suction Outlet Cover – Fits most 8" sumps that 8MFxxx does not fit	R8MFxxx	Floor: 146 Wall: 130	Sump Depth 3" minimum to pipe
	AquaStar  10" Round MoFlow Suction Outlet Cover and Mud Frame	10MFxxx	Floor: 158 Wall: 162	Sump Depth 3" minimum to pipe
	AquaStar  8" Round Star Sumpless Suction Outlet Cover, Solid Riser Ring and Mud Frame	A8Rxxx	Floor: 140 Wall: 84	Sumpless
	AquaStar  10" Round Star Sumpless Suction Outlet Cover, Universal Adapter Kit and Mud Frame	A10RCFRxxx	Floor: 170 Wall: 170	Sumpless

VGB Approved Drain Cover	Manufacturer/Description	Model #	Max Flow in GPM	Sump Info
	AquaStar  8" Round Low-Profile Anti- Entrapment Suction Outlet Cover, Vented Riser Ring and Mud Frame	LP8AVWRxxx	Floor: 100 Wall: 70	Sump Depth 3" minimum to pipe
	Aquastar  10" Round Debris Catcher Anti-Entrapment Suction Outlet Cover and Mud Frame	10LTxxx	Floor Only: 60	Sump Depth 3" minimum to pipe
	Aquastar  20" Full Circle Suction Outlet Cover and One-Port Manufactured Sump	FCxxx	Floor Only: 196.4	Sump Depth 3" minimum to pipe

VGB Approved Drain Cover	Manufacturer/Description	Model #	Max Flow in GPM	Sump Info
	AquaStar		Floor: 236 Wall: 136	Sump Depth 3" minimum
	32" Channel Drain Anti- Entrapment Suction Outlet Cover and Three-Port Manufactured Sump - Unblockable Drain		Wall. 150	to pipe
	Multiple Pipe Connection  For Fiberglass For Standard Concrete For Vinyl	32CDAVFGxxx 32CDAVxxx 32CDAVVxxx		
	AquaStar  32" Channel Drain Flat Grate Anti-Entrapment Suction Outlet Cover and Three-Port Manufactured Sump – Unblockable Drain Multiple Pipe Connection		Floor: 316 Wall: 208	Sump Depth 3" minimum to pipe
	For Fiberglass For Standard Concrete For Vinyl	32CDFLFGxxx 32CDFLxxx 32CDFLVxxx		
	AquaStar  32" Channel Drain <i>Debris Catcher</i> Suction Outlet with ABS Three-Port Manufactured Sump — Unblockable Drain Multiple Pipe Connection		Floor/Wall: 236 GPM	Sump Depth 3" minimum to pipe
	For Fiberglass For Vinyl	32CDLTFGxxx 32CDLTVxxx		

VGB Approved Drain Cover	Manufacturer/Description	Model #	Max Flow in GPM	Sump Info
- And the Assessment of the As	AquaStar  32" Channel Drain <i>Debris Catcher</i> Suction Outlet with ABS Three-Port Manufactured Sump — Unblockable Drain Multiple Pipe Connection	32CDLTxxx	Floor/Wall: 236 GPM	Sump Depth 3" minimum to pipe
	For Standard Concrete			
	AquaStar  32" Channel Drain Pinhole Anti-Entrapment Suction Outlet Cover and Three- Port PVC Manufactured Sump— Unblockable Drain Multiple Pipe Connection  For Standard Concrete	32CDPHxxx	Floor: 268 Wall: 172	Sump Depth 3" minimum to pipe
	AquaStar  32" Channel Drain Pinhole Anti-Entrapment Suction Outlet Cover, ABS Three- Port Manufactured Sump – Unblockable Drain Multiple Pipe Connection  For Fiberglass	32CDPHFGxxx	Floor: 268 Wall: 172	Sump Depth 3" minimum to pipe

VGB Approved Drain Cover	Manufacturer/Description	Model #	Max Flow in GPM	Sump Info
	AquaStar  32" Channel Drain Pinhole Anti-Entrapment Suction Outlet Cover, ABS Three- Port Manufactured Sump — Unblockable Drain Multiple Pipe Connection For Vinyl	32CDPHVxxx	Floor: 268 Wall: 172	Sump Depth 3" minimum to pipe
	AquaStar  4" Round Hockey Puck Sumpless Suction Outlet Cover	4HPxxx	Wall: 56 (only)	Sumpless
	AquaStar  6" Round Hockey Puck Sumpless Suction Outlet Cover, HydroAir/ITT Replacement	бНРххх	2" Pipe Floor: 224 Wall: 224 1.5" Pipe Floor: 177 Wall: 122	Sumpless
	AquaStar  8" Round Hockey Puck Sumpless Suction Outlet Cover and Mud Frame	8НРххх	Floor: 224 Wall: 224	Sumpless

VGB Approved Drain Cover	Manufacturer/Description	Model #	Max Flow in GPM	Sump Info
	Color Match Fittings  8" Drain Cover with Mounting Ring and Riser Ring	8-AV-XXXA	2" Pipe Floor: 112 Wall: 76 3" Pipe Floor: 148 Wall: 100	Distance from Pipe to Cover At least 1.5x pipe diameter
White	Color Match Fittings  8" Pebble Top Drain Cover with Mounting Ring and Riser Ring	8-PTD-XXXA	2" Pipe Floor: 112 Wall: 76 3" Pipe Floor: 144 Wall: 100	Distance from Pipe to Cover At least 1.5x pipe diameter
	Color Match Fittings  10" Drain Cover with Mounting Ring and Riser Ring	10-AV-XXXA	2" Pipe Floor: 152 Wall: 152 3" Pipe Floor: 184 Wall: 144	Distance from Pipe to Cover At least 1.5x pipe diameter
White	Color Match Fittings  10" Pebble Top Drain Cover with Mounting Ring and Riser Ring	10-PTD-XXXA	2" Pipe Floor: 156 Wall: 148 3" Pipe Floor: 180 Wall: 144	Distance from Pipe to Cover At least 1.5x pipe diameter

VGB Approved Drain Cover	Manufacturer/Description	Model #	Max Flow in GPM	Sump Info
Fillable Drain Cover  Universal Riser Ring (with built-in adaptor plate)	Color Match Fittings  10" Retrofit Pebble Top with Universal Adaptor Plate	10RPTD-XXX	2" Pipe Floor: 156 Wall: 108 3" Pipe Floor: 180 Wall: 112	Distance from Pipe to Cover At least 1.5x pipe diameter
	Color Match Fittings  360 Pebble Top Drain – 20" Unblockable Superflow	SuperFlow 360	2.5" Pipe Floor: 300 3"/4" Pipe Floor: 360	Mfg. Sump
Slotted Drain Cover (SuperFlow)  Fillable Sump Lid (apply any plaster, aggregate, or tile here)  Diffuser Plate  Sump  Hydrostatic Relief Valve Por				

VGB Approved Drain Cover	Manufacturer/Description	Model #	Max Flow in GPM	Sump Info
Slotted Drain Cover (SuperFlow) Fillable Sump Lid (apply any plaste; aggregate, or tile here) Diffuser Plate Sump Hydrostatic Relief Valve Port	Color Match Fittings  360 Pebble Top Drain – 20" Unblockable Openflow	OpenFlow 360	2.5" Pipe Floor: 220 3"/4" Pipe Floor: 240	Color Match Mfg. Sump
Color Match Pool Fitting Channel Pebble Top Drain Cover  A&A Manufacturing AVSC Channel Drain Baffle  A&A Manufacturing AVSC Channel Drain Sump	Color Match Fittings  Channel Pebble Top Drain Cover	AAM-PTD-XX	3" Single 200 3" Dual 208	A & A Manufacturing Sump and Baffle – See mfg. spec sheet

VGB Approved Drain Cover	Manufacturer/Description	Model #	Max Flow in GPM	Sump Info
	Color Match Fittings  8-Inch Retrofit	Retro8-xxx	Floor: 156 Wall: 88	Distance from Pipe to Cover At least 1.5x pipe diameter Pipe Size 2" to 2.5"
	Color Match Fittings  10-Inch Retrofit	Retro10-xxx	2" Pipe Floor: 188 Wall: 144 2.5" Pipe Floor: 204 Wall: 124 3" Pipe Floor: 228 Wall: 200	Distance from Pipe to Cover At least 1.5x pipe diameter  Pipe Size 2" to 3"
	Custom Molded Products  Square Drain - 9"x 9"	25508-09x	Floor: 120 Wall: 120	Distance from Pipe to Cover At least 1.5x pipe diameter  Pipe Size 3" minimum

VGB Approved Drain Cover	Manufacturer/Description	Model #	Max Flow in GPM	Sump Info
	Custom Molded Products  Square Drain and Frame - 9"x 9"	25508-09x	Floor: 120 Wall: 120	Distance from Pipe to Cover At least 1.5x pipe diameter  Pipe Size 3" minimum
	Custom Molded Products  Square Drain - 12"x 12"	25508-12x	Floor: 232 Wall: 232	Distance from Pipe to Cover At least 1.5x pipe diameter  Pipe Size 5" minimum
	Custom Molded Products  Square Drain and Frame - 12"x 12"	25508-12x	Floor: 232 Wall: 232	Distance from Pipe to Cover At least 1.5x pipe diameter  Pipe Size 5" minimum

VGB Approved Drain Cover	Manufacturer/Description	Model #	Max Flow in	Sump Info
	Custom Molded Products 18" x 18"	25508-18x	GPM Floor: 424 Wall: 424	Distance from Pipe to Cover At least 1.5x pipe diameter  Pipe Size 5" minimum
	Custom Molded Products  32" Channel Drain - Unblockable	25506-32x	Outer Ports Only – 2.5" Floor: 308 Wall: 212  Outer Ports Only – 2" Floor: 268 Wall: 192  Center Port Only – 2.5" Floor: 200 Wall: 168  Center Port Only – 2" Floor: 184 Wall: 176	Pipe Size 2" minimum
	Custom Molded Products  Galaxy	25513-00x 25513-10x 25514-00x 25515-00x 25516-00x 25519-00x 25513-00x 25537-00x 25539-10x 25548-00x	Floor: 95 Wall: 84	Distance from Pipe to Cover At least 1.5x pipe diameter  Pipe Size 1.5" minimum

VGB Approved Drain Cover	Manufacturer/Description	Model #	Max Flow in GPM	Sump Info
	NOVA	25513-26x 25513-4xx 25513-5xx 25513-6xx 25515-5xx 25516-26x 25516-4xx 25516-5xx 25517-5xx 25539-5xx 25539-6xx 25548-5xx	1.5" Pipe Floor: 140 Wall: 118 2" Pipe Floor: 150 Wall: 118	Distance from Pipe to Cover At least 1.5x pipe diameter  Pipe Size 1.5" minimum
	DrainSafe	DS360	Floor: 123 Wall: 123	Sump Diameter 5" to 8" only -or- Cut off pipe at ½" to 2.5" from cover Pipe Size 2.5" max
DS 360 X  DS 9x9 Adapter Plate  DS Adapter Shims (for deeper frames)	DrainSafe  Cover with Adaptor Plate	DS360x	Floor: 160 (only)	Sump Diameter 9"x 9"  Distance from Pipe to Cover At least 1.5x pipe diameter

VGB Approved Drain Cover	Manufacturer/Description	Model #	Max Flow in GPM	Sump Info
	Hayward  8-inch round – Can only be used on main drains	WG1048e	Floor: 125 Wall: 72	Distance from Pipe to Cover At least 1.5x pipe diameter
	Hayward 9"x9" Low Flow	WG1031BLV	Floor: 190 Wall: 108	Distance from Pipe to Cover At least 1.5x pipe diameter
N.R.	Hayward 9"x9" High Flow	WG1031BHF	Floor: 264 Wall: 224	Distance from Pipe to Cover At least 1.5x pipe diameter

VGB Approved Drain Cover	Manufacturer/Description	Model #	Max Flow in GPM	Sump Info
	Hayward  12"x12" Low Flow	WG1032BLV	Floor: 392 Wall: 260	Distance from Pipe to Cover At least 1.5x pipe diameter
	Hayward  12"x12" High Flow	WG1032BHF	Floor: 515 Wall: 308	Distance from Pipe to Cover At least 1.5x pipe diameter
	Hayward  18"x18" Low Flow	WG1033BLV	Floor: 520 Wall: 520	Distance from Pipe to Cover At least 1.5x pipe diameter

VGB Approved Drain Cover	Manufacturer/Description	Model #	Max Flow in GPM	Sump Info
	Hayward  18"x18" High Flow	WG1033BHF	Floor: 812 Wall: 732	Distance from Pipe to Cover At least 1.5x pipe diameter
	Lawson 9"x9"	No Sump MLD-FG-0909	Floor/Wall 261/248	<u>Distance</u> <u>from Pipe to</u>
	12"x12"	MLD-FG-1212	365/340	Cover At least 1.5x
	18"x18"	MLD-FG-1818	816/712	pipe diameter
		With Sump MLD-SG-0909	261/248	
		MLD-SG-1212	365/340	
		MLD-SG-1818	816/712	
	Neptune Benson 30"x30"	Aegis	Floor: 1432 Wall: 1120	Distance from Pipe to Cover At least 1.5x pipe diameter  Approved to cover sump up 24"x24" in size

VGB Approved Drain Cover	Manufacturer/Description	Model #	Max Flow in GPM	Sump Info
	Paddock 20"X 20"	2020 PCDC	Floor: 1200 (only)	Distance from Pipe to Cover At least 1.5x pipe diameter
	Paddock 24"x 24"	2424 PCDC	Floor: 1420 Wall: 1420	Distance from Pipe to Cover At least 1.5x pipe diameter
	Paddock 24"x 24" Flat Cover	2424 PCFC	Floor: 915 Wall: 915	Distance from Pipe to Cover At least 1.5x pipe diameter
	Paddock 20"x 40"	2020 PCGO	Floor: 1960 Wall: 1960	Distance from Pipe to Cover At least 1.5x pipe diameter

VGB Approved Drain Cover	Manufacturer/Description	Model #	Max Flow in GPM	Sump Info
	Paramount  Only allowed on main drains – unless individually approved	SDX Retro	Floor: 200 Wall: 192	Sumpless – Main drain only
	Paramount SDX2 Retro  Retrofits suction fittings up to 10" diameter	SDX2 Retro	Single Floor: 188 Wall: 154  Dual Floor: 188 Wall: 154  Tri Floor: 282 Wall: 231  Quad Floor: 376 Wall: 308	Sumpless  Pipe Size Minimum 1.5" Pipe up to 4" Pipe
	Pentair	StarGuard 8"	Floor: 144 Wall: 112	Distance from Pipe to Cover At least 1.5x pipe diameter

VGB Approved Drain Cover	Manufacturer/Description	Model #	Max Flow in GPM	Sump Info
1	Waterway	640-801x	164 gpm	Sumpless
-2 -4 -5	Super Maxi Flow for Skimmer Equalizer	640-803x	106 gpm	
	Waterway	640-358x	180 gpm	Sumpless
	SPC-3V without vacuum break			
	Waterway	640-8200	191 gpm	Sumpless
	6" Equalizer Cover	640-8220	136 gpm	
		640-8240	77 gpm	
	Waterway  Tru Flo 8" Covers	640-180x	Floor: 153 Wall: 96	Distance from Pipe to Cover At least 1.5x pipe diameter

VGB Approved Drain Cover	Manufacturer/Description	Model #	Max Flow in GPM	Sump Info
	Waterway  Tru Flo 10" Covers	640-190x	Floor: 200 Wall: 136	Distance from Pipe to Cover At least 1.5x pipe diameter
	Waterway  10" Ultra Retro Drains	640-213x	Floor: 224 Wall: 192	Distance from Pipe to Cover At least 1.5x pipe diameter
	Waterway  10" Ultra-Retro Drains - Vinyl	640-214x	Floor: 224 Wall: 192	Distance from Pipe to Cover At least 1.5x pipe diameter
	Waterway  8" Anti-Vortex Drains	640-231x	Floor: 100 Wall: 64	Distance from Pipe to Cover At least 1.5x pipe diameter

VGB Approved Drain Cover	Manufacturer/Description	Model #	Max Flow in GPM	Sump Info
	Waterway 9" x 9"	640-479x	Floor: 289 Wall: 208	Distance from Pipe to Cover At least 1.5x pipe diameter
	Waterway 12" x 12"	640-472x	Floor: 356 Wall: 280	Distance from Pipe to Cover At least 1.5x pipe diameter
	Waterway 24"x24"	640-476x	Floor: 2035 (only)	Distance from Pipe to Cover At least 1.5x pipe diameter
	Waterway 18" x 18"	640-477x	Floor: 788 (only)	Distance from Pipe to Cover At least 1.5x pipe diameter

VGB Approved Drain Cover	Manufacturer/Description	Model #	Max Flow in GPM	Sump Info
UNBLOCKABLE  VGB 2008  NSF.  Hydrostatic Valve available.	Waterway 32" Ultra Strip Drain	640-132x	Outer Ports Floor: 352 Wall: 304  Center Port Floor: 288 Wall: 232	Sump Included